

**CLAIMS**

I Claim:

- 5 1. A method for upgrading an imaging system comprising the steps of:  
affixing a replacement camera comprising a lens mount to a camera  
adapter coupling wherein the camera adapter coupling comprises an  
attachment end and a lens emulating end opposing the upgrade end and  
wherein the camera is affixed to the camera adapter coupling by mating  
10 the lens emulating end with the lens mount; and  
mating the attachment end of the camera adapter coupling to the an  
existing mating receptacle on an optical assemblage.
- 15 2. The method of Claim 1 wherein the camera is a digital camera.
3. The method of Claim 2 further comprising the steps of:  
receiving a digital image from the digital camera by way of a digital  
interface; and  
20 storing the digital image on computer readable media.
4. The method of Claim 3 further comprising the steps of:  
receiving parametric data associated with the digital image; and  
storing the parametric data on computer readable media together with a  
reference to the digital image.
- 25 5. The method of Claim 3 further comprising the steps of:  
receiving date and/or time data associated with the digital image; and  
storing the date and/or time data on computer readable media together  
with a reference to the digital image.
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6. The method of Claim 3 further comprising the steps of:

receiving position information from satellite-based or terrestrial positioning system; and

storing the position information on computer readable media together with a reference to the digital image.

7. A method for upgrading an imaging system comprising the steps of:

removing an original camera attachment means from the optical assemblage of an imaging instrument;

attaching an upgrade receptacle to the optical assemblage;

affixing a replacement camera comprising a lens mount to a camera adapter coupling wherein the camera adapter coupling comprises an upgrade end and a lens emulating end opposing the upgrade end and wherein the camera is affixed to the camera adapter coupling by mating the lens emulating end with the lens mount; and  
mating the upgrade end of the camera adapter coupling to the upgrade receptacle.

8. The method of Claim 7 wherein the camera is a digital camera.

9. The method of Claim 8 further comprising the steps of:

receiving a digital image from the digital camera by way of a digital interface; and

storing the digital image on computer readable media.

10. The method of Claim 9 further comprising the steps of:

receiving parametric data associated with the digital image; and

storing the parametric data on computer readable media together with a reference to the digital image.

11. The method of Claim 9 further comprising the steps of:

receiving date and/or time data associated with the digital image; and  
storing the date and/or time data on computer readable media together  
with a reference to the digital image.

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12. The method of Claim 9 further comprising the steps of:

receiving position information from satellite-based or terrestrial positioning  
system; and  
storing the position information on computer readable media together with  
a reference to the digital image.

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13. An upgrade kit for imaging systems comprising:

replacement coupling receptacle that mounts on an optical assemblage  
and accepts a camera adapter coupling; and  
camera adapter coupling comprising a first end that mates with the  
replacement coupling receptacle and a second end being a lens-emulating  
end.

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14. The upgrade kit of Claim 13 further comprising a camera.

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15. The upgrade kit of Claim 14 wherein the camera is a digital camera.

16. The upgrade kit of Claim 15 further comprising:

computing device comprising computer readable media for storing digital  
images;  
digital interface that connects the computing device to the digital camera;  
and  
software program that executes in the computing device and controls the  
digital interface to acquire digital images from the digital camera and store  
said images on the computer readable media.

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- 5 17. The upgrade kit of Claim 16 wherein the software program further comprises  
a parametric data module that accepts parametric data from a user and  
stores the parametric data on the computer readable media together with a  
reference to a digital images.
- 10 18. The upgrade kit of Claim 16 wherein the software program further comprises  
a date/time data module that accepts date and/or time data from a time  
source and stores the date and/or time data on the computer readable media  
together with a reference to a digital images.
- 15 19. The upgrade kit of Claim 16 wherein the software program further comprises  
a venue module that accepts position information from a positioning system,  
either satellite-based or terrestrial, and stores the position information on the  
computer readable media together with a reference to the digital images.